AUTHOR INDEX

Altiok, Tayfur and Zuling Kao; *Bounds for Throughput in Production/Inventory Systems in Series with Deterministic Processing Times*; March; p. 82.
Arani, Taghi and Vahid Lotfi; *A Three Phased Approach to Final Exam Scheduling*; March; p. 86.

Balana, Arturo R., Donald Gross and Richard M. Soland; *Optimal Provisioning for Single-Echelon Repairable Item Inventory Control in a Time-Varying Environment*; September; p. 202.
Bartholdi III, John J. and Loren K. Platzman; *Decentralized Control of Automated Guided Vehicles on a Simple Loop*; March; p. 76.
Berens, Wolfgang; *A Bewitched Fermat-Problem*; March; p. 73.
Bookbinder, James H. and Anne E. Lordahl; *Estimation of Inventory Re-Order Levels Using the Bootstrap Statistical Procedure*; December; p. 302.
Bullinger, Hans-Jorg, A. Alan B. Pritsker, A. W. Scheer, Daniel Teichroew, A. B. Whinston, Gary E. Whitehouse, Shimon Y. Nof, S. E. Elmaghraby, Gavriel Salvendy, Deborah J. Seifert, Tibor Vamos, and John A. White; *Research Needs and Challenges in Application of Computer and Information Sciences for Industrial Engineering*; March; p. 50.

Carrillo, Manuel A. and David J. Sumanth; *Productivity Modeling of Group Machine Loading with Variable Processing Times*; March; p. 27.
Case, Kenneth E. and Behrooz Parkhideh; *The Economic Design of a Dynamic $\bar{X}$-Control Chart*; December; p. 313.
Chan, Wenyaw, Anlong Li and Henry C. Co; *Machining Parameter Selection for a Stochastic Flow System*; September; p. 241.
Chandramohan, Jagadeesh, Charles S. Tapiero and Peter H. Ritchken; *Servicing, Quality Design and Control*; September; p. 213.
Cheng, Smiley W. and Frederick A. Spiring; *Assessing Process Capability: A Bayesian Approach*; March; p. 97.
Co, Henry C., Wenyaw Chan and Anlong Li; *Machining Parameter Selection for a Stochastic Flow System*; September; p. 241.

Danusaputro, Surya and Chung-Yee Lee; *Economic Lot Scheduling for Two-Product Problem*; June; p. 162.
Deckro, Richard F.; *Balancing Cycle Time and Workstations*; June; p. 106.
Dominique, C. Rene and Muhittin Oral; *An Analytical Approach to Competitive Strategy Formulation in Mature Industries*; September; p. 271.
Drezner, Z. and G. O. Wesolowsky; *Optimal Control of a Linear Trend Process with Quadratic Loss*; March; p. 66.

Elmaghraby, S. E., Gavriel Salvendy, Deborah J. Seifert, Tibor Vamos, John A. White, Hans-Jorg Bullinger, A. Alan B. Pritsker, A. W. Scheer, Daniel Teichroew, A. B. Whinston, Gary E. Whitehouse, and Shimon Y. Nof; *Research Needs and Challenges in Application of Computer and Information Sciences for Industrial Engineering*; March; p. 50.

Fry, Timothy D., Patrick R. Philipoom and Robert E. Markland; *Due Date Assignment in a Multistage Job Shop*; June; p. 153.
Fry, Timothy D. and Allen E. Smith; *FMS Implementation Procedures: A Case Study*; September; p. 288.

Garvin, David A.; *Managing Quality*; June; p. 191.
Giard, Vincent, Vincent A. Mabert and Arthur V. Hill; *A Decision Support System for Determining Optimal Retention Stocks for Service Parts Inventories*; September; p. 221.
Globerson, Shlomo, Nissan Levin and Avraham Shtub; *The Impact of Breaks on Forgetting When Performing a Repetitive Task*; December; p. 376.
Goldman, Alan J. and I. Douglas Moon; *Tree Network Location Problems with Minimum Separations*; September; p. 230.
Gross, Donald, Richard M. Soland and Arturo R. Balana; *Optimal Provisioning for Single-Echelon Repairable Item Inventory Control in a Time-Varying Environment*; September; p. 202.

Han, Min-Hong and Leon F. McGinnis; *Control of Material Handling Transporter in Automated Manufacturing*; June; p. 184.
Harris, Carl M. and William G. Marchal; *Computing Optimal Server-Vacation Policies*; September; p. 258.
Higle, Julia L.; *A Note on the Sensitivity of the EOQ*; September; p. 294.
Hill, Arthur V., Vincent Giard and Vincent A. Mabert; *A Decision Support System for Determining Optimal Retention Stocks for Service Parts Inventories*; September; p. 221.

Inman, Robert R. and Philip C. Jones; *When is the Economic Lot Scheduling Problem Easy?*; March; p. 11.

Jafari, Mohsen A. and J. George Shanthikumar; *Determination of Optimal Buffer Storage Capacities and Optimal Allocation in Multistage Automatic Transfer Lines*; June; p. 130.
Jones, Philip C. and Robert R. Inman; *When is the Economic Lot Scheduling Problem Easy?*; March; p. 11.

Kao, Zuling and Tayfur Altiok; *Bounds for Throughput in Production/Inventory Systems in Series with Deterministic Processing Times*; March; p. 82.
Karimi, Iftekhar A.; *Optimal Cycle Times in a Two-Stage Serial System with Set-Up and Inventory Costs*; December; p. 324.
Kelle, Peter and Edward A. Silver; *Purchasing Policy of New Containers Considering the Random Returns of Previously Issued Containers*; December; p. 349.
Kelton, W. David; *Random Initialization Methods in Simulation*; December; p. 355.
Kim, Gyutai and Kwangsun Yoon; *Multiple Attribute Decision Analysis with Imprecise Information*; March; p. 21.
Klastorin, T. D. and Kamran Moinzadeh; *Production Lot-Sizing Under Learning Effects: An Efficient Solution Technique*; March; p. 2.
Kumar, Anurag; *Component Inventory Costs in an Assembly Problem with Uncertain Supplier Lead-Times*; June; p. 112.

Lee, Chung-Yee; *A Solution to the Multiple Set-Up Problem with Dynamic Demand*; September; p. 266.
Lee, Chung-Yee and Surya Danusaputro; *Economic Lot Scheduling for Two-Product Problem*; June; p. 162.
Lee, Hau L. and Meir J. Rosenblatt; *A Production and Maintenance Planning Model with Restoration Cost Dependent on Detection Delay*; December; p. 368.
Lee, Hyo-Seong and Stephen M. Pollock; *Approximate Analysis for the Merge Configuration of an Open Queueing Network with Blocking*; June; p. 122.
Leung, Ying Tat and Rajan Suri; *Single Run Optimization of Discrete Event Simulations—An Empirical Study Using the M/M/1 Queue*; March; p. 35.
Levin, Nissan, Avraham Shtub and Shlomo Globerson; *The Impact of Breaks on Forgetting When Performing a Repetitive Task*; December; p. 376.
Li, Anlong, Henry C. Co. and Wenyaw Chan; *Machining Parameter Selection for a Stochastic Flow System*; September; p. 241.
Lordahl, Anne E. and James H. Bookbinder; *Estimation of Inven-*

0740-817X/89/$3.00x00 © 1989 "IIE"

tory Re-Order Levels Using the Bootstrap Statistical Procedure; December; p. 302.
Lotfi, Vahid and Taghi Arani; *A Three Phased Approach to Final Exam Scheduling*; March; p. 86.

McClain, John O., L. Joseph Thomas and Elliott N. Weiss; *Efficient Solutions to a Linear Programming Model for Production Scheduling with Capacity Constraints and No Initial Stock*; June; p. 144.
McGinnis, Leon F. and Min-Hong Han; *Control of Material Handling Transporter in Automated Manufacturing*; June; p. 184.

Mabert, Vincent A., Arthur V. Hill and Vincent Giard; *A Decision Support System for Determining Optimal Retention Stocks for Service Parts Inventories*; September; p. 221.
Marchal, William G. and Carl M. Harris; *Computing Optimal Server-Vacation Policies*; September; p. 258.
Markland, Robert E., Timothy D. Fry and Patrick R. Philipoom; *Due Date Assignment in a Multistage Job Shop*; June; p. 153.
Moinzadeh, Kamran and T. D. Klastorin; *Production Lot-Sizing Under Learning Effects: An Efficient Solution Technique*; March; p. 2.
Montreuil, Benoit and H. Donald Ratliff; *Utilizing Cut Trees as Design Skeletons for Facility Layout*; June; p. 136.
Moon, I. Douglas and Alan J. Goldman; *Tree Network Location Problems with Minimum Separations*; September; p. 230.

Nof, Shimon Y., S. E. Elmaghraby, Gaviel Salvendy, Deborah J. Seifert, Tibor Vamos, John A. White, Hans-Jorg Bullinger, A. Alan B. Pritsker, A. W. Scheer, Daniel Teichroew, A. B. Whinston, and Gary E. Whitehouse; *Research Needs and Challenges in Application of Computer and Information Sciences for Industrial Engineering*; March; p. 50.

Oral, Muhittin and C. Rene Dominique; *An Analytical Approach to Competitive Strategy Formulation in Mature Industries*; September; p. 271.

Parkhideh, Behrooz and Kenneth E. Case; *The Economic Design of a Dynamic $\bar{X}$-Control Chart*; December; p. 313.
Philipoom, Patrick R., Robert E. Markland and Timothy D. Fry; *Due Date Assignment in a Multistage Job Shop*; June; p. 153.
Pirkul, Hasan; *The Uncapacitated Facility Location Problem with Primary and Secondary Facility Requirements*; December; p. 337.
Platzman, Loren K. and John J. Bartholdi, III,; *Decentralized Control of Automated Guided Vehicles on a Simple Loop*; March; p. 76.
Pollock, Stephen M. and Hyo-Seong Lee; *Approximate Analysis for the Merge Configuration of an Open Queueing Network with Blocking*; June; p. 122.
Pritsker, A. Alan B., A. W. Scheer, Daniel Teichroew, A. B. Whinston, Gary E. Whitehouse, Shimon Y. Nof, S. E. Elmaghraby, Gavriel Salvendy, Deborah J. Seifert, Tibor Vamos, John A. White, and Hans-Jorg Bullinger; *Research Needs and Challenges in Application of Computer and Information Sciences for Industrial Engineering*; March; p. 50.

Ratliff, H. Donald and Benoit Montreuil; *Utilizing Cut Trees as Design Skeletons for Facility Layout*; June; p. 136.
Ritchken, Peter H., Jagadeesh Chandramohan and Charles S. Tapiero; *Servicing, Quality Design and Control*; September; p. 213.
Rosenblatt, Meir J. and Hau L. Lee; *A Production and Maintenance Planning Model with Restoration Cost Dependent on Detection Delay*; December; p. 368.

Salvendy, Gavriel, Deborah J. Seifert, Tibor Vamos, John A. White, Hans-Jorg Bullinger, A. Alan B. Pritsker, A. W. Scheer, Daniel Teichroew, A. B. Whinston, Gary E. Whitehouse, Shimon Y. Nof, and S. E. Elmaghraby; *Research Needs and Challenges in Application of Computer and Information Sciences for Industrial Engineering*; March; p. 50.
Scheer, A. W., Daniel Teichroew, A. B. Whinston, Gary E. Whitehouse, Shimon Y. Nof, S. E. Elmaghraby, Gavriel Salvendy, Deborah J. Seifert, Tibor Vamos, John A. White, Hans-Jorg Bullinger, and A. Alan B. Pritsker; *Research Needs and Challenges in Application of Computer and Information Sciences for Industrial Engineering*; March; p. 50.
Seifert, Deborah J., Tibor Vamos, John A. White, Hans-Jorg Bullinger, A. Alan B. Pritsker, A. W. Scheer, Daniel Teichroew, A. B. Whinston, Gary E. Whitehouse, Shimon Y. Nof, S. E. Elmaghraby, and Gavriel Salvendy; *Research Needs and Challenges in Application of Computer and Information Sciences for Industrial Engineering*; March; p. 50.
Seifoddini, Hamid; *Duplication Process in Machine Cells Formation in Group Technology*; December; p. 382.
Shanthikumar, J. George and Mohsen A. Jafari; *Determination of Optimal Buffer Storage Capacities and Optimal Allocation in Multistage Automatic Transfer Lines*; June; p. 130.
Shaw, Michael J. and Andrew B. Whinston; *An Artifical Intelligence Approach to the Scheduling of Flexible Manufacturing Systems*; June; p. 170.
Shtub, Avraham, Shlomo Globerson and Nissan Levin; *The Impact of Breaks on Forgetting When Performing a Repetitive Task*; December; p. 376.
Silver, Edward A. and Peter Kelle; *Purchasing Policy of New Containers Considering the Random Returns of Previously Issued Containers*; December; p. 349.
Smith, Allen E. and Timothy D. Fry; *FMS Implementation Procedures: A Case Study*; September; p. 288.
Soland, Richard M., Arturo R. Balana and Donald Gross; *Optimal Provisioning for Single-Echelon Repairable Item Inventory Control in a Time-Varying Environment*; September; p. 202.
Spiring, Frederick A. and Smiley W. Cheng; *Assessing Process Capability: A Bayesian Approach*; March; p. 97.
Sumanth, David J. and Manuel A. Carrillo; *Productivity Modeling of Group Machine Loading with Variable Processing Times*; March; p. 27.
Suri, Rajan and Ying Tat Leung; *Single Run Optimization of Discrete Event Simulations—An Empirical Study Using the M/M/1 Queue*; March; p. 35.

Tagaras, George; *Effects of Pooling on the Optimization and Service Levels of Two-Location Inventory Systems*; September; p. 250.
Tang, Jen and Kwei Tang; *A Two-Sided Screening Procedure Using Several Correlated Variables*; December; p. 333.
Tang, Kwei and Jen Tang; *A Two-Sided Screening Procedure Using Several Correlated Variables*; December; p. 333.
Tapiero, Charles S., Peter H. Ritchken and Jagadeesh Chandramohan; *Servicing, Quality Design and Control*; September; p. 213.
Teichroew, Daniel, A. B. Whinston, Gary E. Whitehouse, Shimon Y. Nof, S. E. Elmaghraby, Gavriel Salvendy, Deborah J. Seifert, Tibor Vamos, John A. White, Hans-Jorg Bullinger, A. Alan B. Pritsker, and A. W. Scheer; *Research Needs and Challenges in Application of Computer and Information Sciences for Industrial Engineering*; March; p. 50.
Thomas, L. Joseph, Elliott N. Weiss and John O. McClain; *Efficient Solutions to a Linear Programming Model for Production Scheduling with Capacity Constraints and No Initial Stock*; June; p. 144.

Treleven, Mark; *A Review of the Dual Resource Constrained System Research*; September; p. 279.

Vamos, Tibor, John A. White, Hans-Jorg Bullinger, A. Alan B. Pritsker, A. W. Scheer, Daniel Teichroew, A. B. Whinston, Gary E. Whitehouse, Shimon Y. Nof, S. E. Elmaghraby, Gavriel Salvendy, and Deborah J. Seifert; *Research Needs and Challenges in Application of Computer and Information Sciences for Industrial Engineering*; March; p. 50.

Weiss, Elliott N., John O. McClain and L. Joseph Thomas; *Efficient Solutions to a Linear Programming Model for Production Scheduling with Capacity Constraints and No Initial Stock*; June; p. 144.

Wesolowsky, G. O. and Z. Drezner; *Optimal Control of a Linear Trend Process with Quadratic Loss*; March; p. 66.

Whinston, A. B., Gary E. Whitehouse, Shimon Y. Nof, S. E. Elmaghraby, Gavriel Salvendy, Deborah J. Seifert, Tibor Vamos, John A. White, Hans-Jorg Bullinger, A. Alan B. Pritsker, A. W. Scheer, and Daniel Teichroew; *Research Needs and Challenges in Application of Computer and Information Sciences for Industrial Engineering*; March; p. 50.

Whinston, Andrew B. and Michael J. Shaw; *An Artificial Intelligence Approach to the Scheduling of Flexible Manufacturing Systems*; June; p. 170.

White, John A., Hans-Jorg Bullinger, A. Alan B. Pritsker, A. W. Scheer, Daniel Teichroew, A. B. Whinston, Gary E. Whitehouse, Shimon Y. Nof, S. E. Elmaghraby, Gavriel Salvendy, Deborah J. Seifert, and Tibor Vamos; *Research Needs and Challenges in Application of Computer and Information Sciences for Industrial Engineering*; March; p. 50.

Whitehouse, Gary E., Shimon Y. Nof, S. E. Elmaghraby, Gavriel Salvendy, Deborah J. Seifert, Tibor Vamos, John A. White, Hans-Jorg Bullinger, A. Alan B. Pritsker, A. W. Scheer, Daniel Teichroew, and A. B. Whinston; *Research Needs and Challenges in Application of Computer and Information Sciences for Industrial Engineering*; March; p. 50.

Yoon, Kwangsun and Gyutai Kim; *Multiple Attribute Decision Analysis with Imprecise Information*; March; p. 21.

Subject Index

0100 Costs

0103 Cost Estimating

Production Lot-Sizing Under Learning Effects: An Efficient Solution Technique; Klastorin, T. D. and Kamran Moinzadeh; March; p. 2.

Optimal Control of a Linear Trend Process with Quadratic Loss; Drezner, Z. and G. O. Wesolowsky; March; p. 66.

Component Inventory Costs in an Assembly Problem with Uncertain Supplier Lead-Times; Kumar, Anurag; June; p. 112.

The Uncapacitated Facility Location Problem with Primary and Secondary Facility Requirements; Pirkul, Hasan; December; p. 337.

A Production and Maintenance Planning Model with Restoration Cost Dependent on Detection Delay; Lee, Hau L. and Meir J. Rosenblatt; December; p. 368.

0104 Cost Reduction Programs

Servicing, Quality Design and Control; Ritchken, Peter H., Jagadeesh Chandramohan and Charles S. Tapiero; September; p. 213.

Duplication Process in Machine Cells Formation in Group Technology; Seifoddini, Hamid; December; p. 382.

0300 Engineering Economics

0303 Investment Analysis

Multiple Attribute Decision Analysis with Imprecise Information; Yoon, Kwangsun and Gyutai Kim; March; p. 21.

0400 Facilities Planning, Design

0402 Facility Location

A Bewitched Fermat-Problem; Berens, Wolfgang; March; p. 73.

Tree Network Location Problems with Minimum Separations; Moon, I. Douglas and Alan J. Goldman; September; p. 230.

The Uncapacitated Facility Location Problem with Primary and Secondary Facility Requirements; Pirkul, Hasan; December; p. 337.

0404 Plant Design, Construction

Utilizing Cut Trees as Design Skeletons for Facility Layout; Montreuil, Benoit and H. Donald Ratliff; June; p. 136.

0405 Plant Layout Analysis

Utilizing Cut Trees as Design Skeletons for Facility Layout; Montreuil, Benoit and H. Donald Ratliff; June; p. 136.

0600 Human Engineering

0603 Ergonomics

The Impact of Breaks on Forgetting When Performing a Repetitive Task; Globerson, Shlomo, Nissan Levin and Avraham Shtub; December; p. 376.

0604 Learning

Production Lot-Sizing Under Learning Effects: An Efficient Solution Technique; Klastorin, T. D. and Kamran Moinzadeh; March; p. 2.

The Impact of Breaks on Forgetting When Performing a Repetitive Task; Globerson, Shlomo, Nissan Levin and Avraham Shtub; December; p. 376.

0900 Industries

0904 Manufacturing

An Analytical Approach to Competitive Strategy Formulation in Mature Industries; Oral, Muhittin and C. Rene Dominique; September; p. 271.

1000 Management

1003 Decision Making

Multiple Attribute Decision Analysis with Imprecise Information; Yoon, Kwangsun and Gyutai Kim; March; p. 21.

1005 Management Development

An Analytical Approach to Competitive Strategy Formulation in Mature Industries; Oral, Muhittin and C. Rene Dominique; September; p. 271.

1100 Material Handling

1101 Containers, Unit Loads

Purchasing Policy of New Containers Considering the Random Returns of Previously Issued Containers; Kelle, Peter and Edward A. Silver; December; p. 349.

1105 Dispatching, Scheduling

Decentralized Control of Automated Guided Vehicles on a Simple Loop; Bartholdi, III, John J. and Loren K. Platzman; March; p. 77.

Control of Material Handling Transporter in Automated Manufacturing; Han, Min-Hong and Leon F. McGinnis; June; p. 184.

1200 Methods Engineering

1205 Manufacturing Engineering

Productivity Modeling of Group Machine Loading with Variable Processing Times; Sumanth, David J. and Manuel A. Carrillo; March; p. 27.

Single Run Optimization of Discrete Event Simulations—An Empirical Study Using the M/M/1 Queue; Suri, Rajan and Ying Tat Leung; March; p. 35.

Optimal Control of a Linear Trend Process with Quadratic Loss; Drezner, Z. and G. O. Wesolowsky; March; p. 66.

Bounds for Throughput in Production/Inventory Systems in Series with Deterministic Processing Times; Altiok, Tayfur and Zuling Kao; March; p. 82.

Determination of Optimal Buffer Storage Capacities and Optimal Allocation in Multistage Automatic Transfer Lines; Jafari, Mohsen A. and J. George Shanthikumar; June; p. 130.

An Artificial Intelligence Approach to the Scheduling of Flexible Manufacturing Systems; Shaw, Michael J. and Andrew B. Whinston; June; p. 170.

Machining Parameter Selection for a Stochastic Flow System; Chan, Wenyaw, Anlong Li and Henry C. Co; September; p. 241.

A Review of the Dual Resource Constrained System Research; Treleven, Mark; September; p. 279.

FMS Implementation Procedure: A Case Study; Fry, Timothy D. and Allen E. Smith; September; p. 288.

Duplication Process in Machine Cells Formation in Group Technology; Seifoddini, Hamid; December; p. 382.

1209 Process Design

FMS Implementation Procedure: A Case Study; Fry, Timothy D. and Allen E. Smith; September; p. 288.

1210 Research

Research Needs and Challenges in Application of Computer and Information Sciences for Industrial Engineering; Nof, Shimon Y., E. E. Elmaghraby, Gavriel Salvendy, Deborah J. Seifert, Tibor Vamos, John A. White, Hans-Jorg Bullinger, A. Alan B. Pritsker, A. W. Scheer, Daniel Teichroew, A. B. Whinston, and Gary E. Whitehouse; March; p. 50.

1300 Quantitative Methods

1301 Mathematical Models

Production Lot-Sizing Under Learning Effects: An Efficient Solution Technique; Klastorin, T. D. and Kamran Moinzadeh; March; p. 2.

When Is The Economic Lot Scheduling Problem Easy?; Jones, Philip C. and Robert R. Inman; March; p. 11.

Multiple Attribute Decision Analysis with Imprecise Information; Yoon, Kwangsun and Gyutai Kim; March; p. 21.

Productivity Modeling of Group Machine Loading with Variable Processing Times; Sumanth, David J. and Manuel A. Carrillo; March; p. 27.

Single Run Optimization of Discrete Event Simulations—An Empirical Study Using the M/M/1 Queue; Suri, Rajan and Ying Tat Leung; March; p. 35.

Optimal Control of a Linear Trend Process with Quadratic Loss; Drezner, Z. and G. O. Wesolosky; March; p. 66.

Bounds for Throughput in Production/Inventory Systems in Series with Deterministic Processing Times; Altiok, Tayfur and Zuling Kao; March; p. 82.

A Three Phased Approach to Final Exam Scheduling; Arani, Taghi and Vahid Lotfi; March; p. 86.

Balancing Cycle Time and Workstations; Deckro, Richard F.; June; p. 106.

Component Inventory Costs in an Assembly Problem with Uncertain Supplier Lead-Times; Kumar, Anurag; June; p. 112.

Approximate Analysis for the Merge Configuration of an Open Queueing Network with Blocking; Lee, Hyo-Seong and Stephen M. Pollock; June; p. 122.

Determination of Optimal Buffer Storage Capacities and Optimal Allocation in Multistage Automatic Transfer Lines; Jafari, Mohsen A. and J. George Shanthikumar; June; p. 130.

Economic Lot Scheduling for Two-Product Problem; Lee, Chung-Yee and Surya Danusaputro; June; p. 162.

Control of Material Handling Transporter in Automated Manufacturing; Han, Min-Hong and Leon F. McGinnis; June; p. 184.

Optimal Provisioning for Single-Echelon Repairable Item Inventory Control in a Time-Varying Environment; Balana, Arturo R., Donald Gross and Richard M. Soland; September; p. 202.

Servicing, Quality Design and Control; Ritchken, Peter H., Jagadeesh Chandramohan and Charles S. Tapiero; September; p. 213.

Machining Parameter Selection for a Stochastic Flow System; Chan, Wenyaw, Anlong Li and Henry C. Co; September; p. 241.

Effects of Pooling on the Optimization and Service Levels of Two-Location Inventory Systems; Tagaras, George; September; p. 250.

A Solution to the Multiple Set-Up Problem with Dynamic Demand; Lee, Chung-Yee; September; p. 266.

Purchasing Policy of New Containers Considering the Random Returns of Previously Issued Containers; Kelle, Peter and Edward A. Silver; December; p. 349.

Optimal Cycle Times in a Two-Stage Serial System with Set-up and Inventory Costs; Karimi, Iftekhar A.; December; p. 324.

1302 Networks

Utilizing Cut Trees as Design Skeletons for Facility Layout; Montreuil, Benoit and H. Donald Ratliff; June; p. 136.

Tree Network Location Problems with Minimum Separations; Moon, I. Douglas and Alan J. Goldman; September; p. 230.

1303 Programming: Linear, Nonlinear

Balancing Cycle Time and Workstations; Deckro, Richard F.; June; p. 106.

Efficient Solutions to a Linear Programming Model for Production Scheduling With Capacity Constraints and No Initial Stock; McClain, John O., L. Joseph Thomas and Elliott N. Weiss; June; p. 144.

Computing Optimal Server-Vacation Policies; Harris, Carl M. and William G. Marchal; September; p. 258.

An Analytical Approach to Competitive Strategy Formulation in Mature Industries; Oral, Muhittin and C. Rene Dominique; September; p. 271.

The Uncapacitated Facility Location Problem with Primary and Secondary Facility Requirements; Pirkul, Hasan; December; p. 337.

1305 Simulation/Games

Single Run Optimization of Discrete Event Simulations—An Empirical Study Using the M/M/1 Queue; Suri, Rajan and Ying Tat Leung; March; p. 35.

Due Date Assignment in a Multistage Job Shop; Fry, Timothy D., Patrick R. Philipoom and Robert E. Markland; June; p. 153.

Random Initialization Methods in Simulation; Kelton, W. David; December; p. 355.

1306 Applied Probability

Assessing Process Capability: A Bayesian Approach; Cheng, Smiley W. and Frederick A. Spiring; March; p. 97.

Approximate Analysis for the Merge Configuration of an Open Queueing Network with Blocking; Lee, Hyo-Seong and Stephen M. Pollock; June; p. 122.

Optimal Provisioning for Single-Echelon Repairable Item Inventory Control in a Time-Varying Environment; Balana, Arturo R., Donald Gross and Richard M. Soland; September; p. 202.

Computing Optimal Server-Vacation Policies; Harris, Carl M. and William G. Marchal; September; p. 258.

Estimation of Inventory Re-Order Levels Using the Bootstrap Statistical Procedure; Bookbinder, James H. and Anne E. Lordahl; December; p. 302.

The Economic Design of a Dynamic $\overline{X}$-Control Chart; Parkhideh, Behrooz and Kenneth E. Case; December; p. 313.

A Two-Sided Screening Procedure Using Several Correlated Variables; Tang, Jen and Kwei Tang; December; p. 333.

Random Initialization Methods in Simulation; Kelton, W. David; December; p. 355.

1400 Production and Inventory Control

1402 Forecasting

A Decision Support System for Determining Optimal Retention Stocks for Service Parts Inventories; Hill, Arthur V., Vincent Giard and Vincent A. Mabert; September; p. 221.

A Note on the Sensitivity of the EOQ; Higle, Julia L.; September; p. 294.

1403 Inventory Control

Production Lot-Sizing Under Learning Effects: An Efficient Solution Technique; Klastorin, T. D. and Kamran Moinzadeh; March; p. 2.

When Is The Economic Lot Scheduling Problem Easy?; Jones, Philip C. and Robert R. Inman; March; p. 11.

Bounds for Throughput in Production/Inventory Systems in Series with Deterministic Processing Times; Altiok, Tayfur and Zuling Kao; March; p. 82.

Component Inventory Costs in an Assembly Problem with Uncertain Supplier Lead-Times; Kumar, Anurag; June; p. 112.

Optimal Provisioning for Single-Echelon Repairable Item Inventory Control in a Time-Varying Environment; Balana, Arturo R., Donald Gross and Richard M. Soland; September; p. 202.

A Decision Support System for Determining Optimal Reten-

tion Stocks for Service Parts Inventories; Hill, Arthur V., Vincent Giard and Vincent A. Mabert; September; p. 221.
Effects of Pooling on the Optimization and Service Levels of Two-Location Inventory Systems; Tagaras, George; September; p. 250.
A Note on the Sensitivity of the EOQ; Higle, Julia L.; September; p. 294.
Purchasing Policy of New Containers Considering the Random Returns of Previously Issued Containers; Kelle, Peter and Edward A. Silver; December; p. 349.
Estimation of Inventory Re-Order Levels Using the Bootstrap Statistical Procedure; Bookbinder, James H. and Anne E. Lordahl; December; p. 302.
Optimal Cycle Times in a Two-Stage Serial System with Set-up and Inventory Costs; Karimi, Iftekhar A.; December; p. 324.

1405 Production Control
Bounds for Throughput in Production/Inventory Systems in Series with Deterministic Processing Times; Altiok, Tayfur and Zuling Kao; March; p. 82.
Due Date Assignment in a Multistage Job Shop; Fry, Timothy D., Patrick R. Philipoom and Robert E. Markland; June; p. 153.
A Review of the Dual Resource Constrained System Research; Treleven, Mark; September; p. 279.

1406 Production Planning
Production Lot-Sizing Under Learning Effects: An Efficient Solution Technique; Klastorin, T. D. and Kamran Moinzadeh; March; p. 2.
A Solution to the Multiple Set-Up Problem with Dynamic Demand; Lee, Chung-Yee; September; p. 266.
A Note on the Sensitivity of the EOQ; Higle, Julia L.; September; p. 294.
Optimal Cycle Times in a Two-Stage Serial System with Set-up and Inventory Costs; Karimi, Iftekhar A.; December; p. 324.
A Production and Maintenance Planning Model with Restoration Cost Dependent on Detection Delay; Lee, Hau L. and Meir J. Rosenblatt; December; p. 368.

1407 Production Scheduling
When Is The Economic Lot Scheduling Problem Easy?; Jones, Philip C. and Robert R. Inman; March; p. 11.
Productivity Modeling of Group Machine Loading with Variable Processing Times; Sumanth, David J. and Manuel A. Carrillo; March; p. 27.
Balancing Cycle Time and Workstations; Deckro, Richard F.; June; p. 106.
Efficient Solutions to a Linear Programming Model for Production Scheduling With Capacity Constraints and No Initial Stock; McClain, John O., L. Joseph Thomas and Elliott N. Weiss; June; p. 144.
Economic Lot Scheduling for Two-Product Problem; Lee, Chung-Yee and Surya Danusaputro; June; p. 162.
An Artificial Intelligence Approach to the Scheduling of Flexible Manufacturing Systems; Shaw, Michael J. and Andrew B. Whinston; June; p. 170.
A Solution to the Multiple Set-Up Problem with Dynamic Demand; Lee, Chung-Yee; September; p. 266.
A Production and Maintenance Planning Model with Restoration Cost Dependent on Detection Delay; Lee, Hau L. and Meir J. Rosenblatt; December; p. 368.

1500 Quality Control

1501 Inspection
A Two-Sided Screening Procedure Using Several Correlated Variables; Tang, Jen and Kwei Tang; December; p. 333.
A Production and Maintenance Planning Model with Restoration Cost Dependent on Detection Delay; Lee, Hau L. and Meir J. Rosenblatt; December; p. 368.

1502 Quality Control
Assessing Process Capability: A Bayesian Approach; Cheng, Smiley W. and Frederick A. Spiring; March; p. 97.
Managing Quality; Garvin, David A.; June; p. 191.
Servicing, Quality Design and Control; Ritchken, Peter H., Jagadeesh Chandramohan and Charles S. Tapiero; September; p. 213.
The Economic Design of a Dynamic $\overline{X}$-Control Chart; Parkhideh, Behrooz and Kenneth E. Case; December; p. 313.

1504 Sampling
Servicing, Quality Design and Control; Ritchken, Peter H., Jagadeesh Chandramohan and Charles S. Tapiero; September; p. 213.

1704 Information Retrieval
An Artificial Intelligence Approach to the Scheduling of Flexible Manufacturing Systems; Shaw, Michael J. and Andrew B. Whinston; June; p. 170.